

Application No. 10/051,927
Amendment dated January 12, 2005
Reply to Office Action of July 12, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1:

(Original) A storage apparatus for boxes containing fruit, comprising:

a cabinet including side walls, a rear wall, front walls, and a cover portion, said cabinet having an interior volume of a size sufficient to house a stack of said boxes;

said front walls of said cabinet defining an access opening for insertion and withdrawal of one or more of said boxes;

each of said side walls of said cabinet comprising an outer wall, an inner wall separated from said outer wall by a space, and a plurality of vertically oriented partitions disposed between said inner and outer walls, said partitions being spaced from one another and being in intimate contact with said inner and outer side walls, so that said inner and outer side walls define, with said partitions, air flow channels; and

said cover portion being positioned atop the front, side and rear walls, said cover portion housing blowers disposed atop the air flow channels of each side wall and conduit means interconnecting said blowers and said channels for fluidly communicating said blowers with said air flow channels.

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Claim 2:

(Original) The storage apparatus of claim 1, wherein said cover portion further houses a condenser coil and air-conditioning apparatus.

Claim 3:

(Original) The storage apparatus of claim 1, wherein said inner walls each include a plurality of apertures, each of said apertures being associated with a unique one of said air flow channels to allow the air in that channel to impact boxes of fruit located adjacent that aperture.

Claim 4:

(Original) The storage apparatus of claim 3, wherein said apertures are arranged at horizontally staggered positions.

Claim 5:

(Original) The storage apparatus of claim 1, wherein said cabinet includes a return for directing air emanating from the apertures in said inner wall of said cabinet to the cover portion.

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Claim 6:

(Original) The storage apparatus of claim 1, wherein said cover portion further includes at least one motor for driving said fans.

Claim 7:

(Original) The storage apparatus of claim 6, wherein each fan is driven by a separate motor.

Claim 8:

(Original) The storage apparatus of claim 6, wherein each pair of fans is driven by a separate motor.

Claim 9:

(Original) The storage apparatus of claim 1, wherein said front walls include narrow edge wall portions disposed at an acute angle to said front walls, said narrow edge wall portions forming a guide to facilitate insertion and withdrawal of said stack of boxes.

Claim 10:

(Original) The storage apparatus of claim 1, and further including a closure carried by the cabinet to block egress of air from the interior of said cabinet.

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Claim 11:

(Original) The storage apparatus of claim 10, wherein said closure comprises at least one sheet of plastic material.

Claim 12:

(Original) The storage apparatus of claim 10, wherein said closure is attached to said cabinet between said front wall portions.

Claim 13:

(New) A storage apparatus for boxes containing fruit, comprising:

a cabinet including side walls, a rear wall, front walls, and a cover portion, said cabinet having an interior volume of a size sufficient to house a stack of said boxes;

said front walls of said cabinet defining an access opening for insertion and withdrawal of one or more of said boxes;

each of said side walls of said cabinet comprising an outer wall, an inner wall separated from said outer wall by a space, and a plurality of vertically oriented partitions disposed between said inner and outer walls, said partitions being spaced from one another and being in intimate contact with said inner and outer side walls, so that said inner and outer side walls define, with said partitions, at least two separate air flow channels which are isolated from each other and which provide for air flow

independently to each level of said stacked boxes; and

said cover portion being positioned atop the front, side and rear walls, said cover portion housing blowers disposed atop the air flow channels of each side wall and conduit means interconnecting said blowers and said channels for fluidly communicating said blowers with said air flow channels.

Claim 14:

(New) A storage apparatus for stacked boxes containing fruit, comprising:

a chamber having a volume defined by a floor, ceiling, and sidewalls including an access opening for insertion and withdrawal of one or more of said boxes;

alignment structure within the chamber for spacing stored product apart from the sidewall, the stored product having a height comprised of stacked boxes;

at least two substantially airtight volumes defined by a sidewall and a second interior wall substantially parallel to said sidewall, each said sidewall and second interior wall extending along the height of the stored product to define a pressurized volume; and

a source of air operably connected to the chamber for circulating fluid through the stacked boxes by blowing said air into said pressurized volume and for withdrawing the fluid from another side of the stored product thereby creating a substantially closed air flow path to and from the said source of air;

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wherein further each said pressurized volume is further divided internally into at least two separate pressurized volumes isolated from each other and each communicating with the output of said source of air whereby each internal pressurized volume provided air flow to a separate level of the stacked boxes.